

IN THE SPECIFICATION:

Please replace the Abstract with the following amended abstract. Please have this Abstract begin on a new page. Applicant also encloses a clean version of the Abstract.

A method for developing an automation client program in a graphical programming environment is disclosed. The graphical programming environment provides a set of automation nodes ~~and controls which~~ that may be dropped and wired together to create a graphical program. ~~The nodes include an automation refnum which references a,~~ including nodes for referencing user-selected automation classes from an automation type libraries exported by an automation server applications, such as Microsoft Excel; an automation open nodes for which instantiates an instantiating objects from the selected automation class; and an automation invoke nodes for which invokes a user-selected methods and/or properties of the automation class; and an automation property node which invokes, i.e., reads or writes, user selected properties of the automation class. The nodes enable the displaying, manipulating, cataloging, editing or performance other operations, such as may be performed by an automation server, on data acquired or generated by a virtual instrument. A method for performing class and/or propagation ~~and~~ type propagation checking of automation objects in a graphical programs is also disclosed. The automation class of a first automation node is propagated from the first node to a second automation node when the two nodes are wired together or when the automation class of the first node is changed to a second class. The automation ~~invoke node and automation property nodes~~ perform type checking to verify that the user-selected method or property is valid ~~for, i.e., defined by, the automation class of the node. The node requests an object manager to determine whether or not the method or property is valid. The object manager queries a type library which the automation class is in, in order to obtain a list of valid methods and properties for the automation class of the node. The object manager searches the list to determine if the specified method or property is present in the list, i.e., is valid.~~